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ABSTRACT

A profile of Iran is sketched in this paper. Emphasis is placed on the nature, scope, and accomplishments of population activities in the country. Topics and sub-topics include: location and description of the country; population--size, number of households, women of reproductive age, growth patterns, role of women, urban/rural distribution, ethnic and religious composition, literacy, economic status, and contraceptive knowledge; population growth and development--national economics and social welfare expenditures; history of population concerns; population policies; population programs--objectives, organization, operations, governmental role, education and communication efforts, and private agencies in family planning; and foreign assistance for family planning activities. Summary statements indicate that program policy is to offer contraceptive information and services through the growing national network of family planning clinics, relying almost exclusively on pills as the contraceptive technique. The strength and sense of urgency of the national commitment can be seen both in the rapidly increasing channeling of talent and financial resources to this effort and in the ambition of national goals for decreasing the current high population growth rate. References and a country map are given. (BL)

Country Profiles

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IRAN

by JOHN K. FRIESEN *and* RICHARD V. MOORE

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Location and Description

Iran is a large and unusually heterogenous country from every point of view. Topographically and climatically it includes high mountain ranges, vast deserts, tropical lowlands (along the Caspian littoral), and hot dry plains near the Persian Gulf. In general, water resources are a major limiting factor to growth, with only about 13 percent of the country's 1.65 million square kilometers (637,000 square miles) cultivable. At present, approximately one-third of this land is under cultivation. Much of Iran is mountain and plateau at an altitude in excess of 1,500 meters (4,900 feet). It borders on Turkey and Iraq to the west, on the Persian Gulf and the Sea of Oman to the south, on Pakistan and Afghanistan to the east, and on the USSR to the north.

Socially, the country is just as diverse. A substantial portion of the population is of Turkish, Arabic, Caucasian, or Central Asian origin. Although Farsi is the official language, Iran's rich ethnic mosaic sustains the use of many other languages and dialects. Last year Iran celebrated the 2,500th anniversary of the monarchy that began with Cyrus the Great, making Iran the world's longest-lived monarchy.

Historically Iran has been a basically agricultural and rural country only intermittently tied together into a discrete national entity. The worldwide modernizing forces of the last 100 years, accelerated and promoted in Iran by the former and present shahanshahs, are bringing about rapid and far-reaching changes throughout the society. One of the important reforms of recent decades has been the comprehensive land reform program initiated by the monarch. This program, in which many thousands of hectares of land have been redistributed, was declared completed during 1971. Also undergoing rapid change is mass communication. Although media are still concentrated in urban areas, a sophisticated national telephone and telecommunications network is nearing completion. For better transportation, Iran, in collaboration with Turkey, in 1971 completed a rail link with western Europe, and a Central Treaty Organization (CENTO) road links Iran to both its eastern and western neighbors. Other social institutions, especially education, have received considerable improvement during recent decades and are developing rapidly.

The major source for the financing of Iran's rapid modernization is the country's vast oil resources. Other leading exports include fruits and nuts, carpets, minerals, wool and textiles, some manufactured goods (for example, trucks and buses), and caviar.

Political and Administrative Organization

Iran is a constitutional monarchy with executive, legislative, and judicial branches of government. The executive branch is divided into 19 ministries, united at the top by the office of the prime minister and cabinet. The nation itself is a centralized, unitary system divided into 13 provinces and nine governorates, the head of each of these 22 divisions being appointed by the shah. Each province and governorate is further broken down into counties (shahrestans) and about 1,200 cities and townships. These latter entities are headed by mayors and city administrations that are separate from the executive structure at the local level, a structure that resembles the central ministerial organization.

Population

According to the 1966 census, the population was 25,078,923 (12,981,665 males and 12,097,258 females). By 1972 it has been estimated to be 31 million (Saxena 1972).

Households

The number of households in 1966 was 5,029,320, of which 3,068,619 were in rural and 1,960,701 in urban areas. The average size of households in rural areas was 7.6 persons, and in urban, 5.8 persons. Ninety-four percent of household heads were male, and nearly half of all households included one or more literate persons. The country has an estimated 3,898,719 housing units, of which about 19 percent are occupied by two or more households (1966 census; Amani 1971).

Women of Reproductive Age

There were 5,212,803 women of reproductive age (15–44) in 1966. The 1971 estimate is 5.51 million, of which 4.54 million are married. Approximately half of the women in the 15–

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19 age group are married. The mean age of a man's first marriage is 25.5 years, while a woman's is 18.6 years. The minimum legal age at marriage is 15 years. The UN "low" growth projection forecasts almost 11 million women in the 15–44 age group in 1990, plus nearly 3 million more who will have passed through this age range during the preceding 20 years. Subtracting never-married and subfecund women from these estimates leaves a target group for family planning purposes of over 10 million women within the next 20 years (UN 1971, TAO/IRA/60, pp. 43, 44; Taylor and Berelson 1971, p. 27; 1966 census).

Growth Patterns

Iran's rate of population increase was estimated to be about 2.9 percent per year during the 1956–1966 period. Current estimates place the 1971 birthrate at about 48 per thousand per year, and the death rate at about 16, which provide a current estimated rate of natural increase of 3.2 percent per year, one of the world's highest. The women of Iran average about seven live births. At the current estimated growth rate the present population will double in 21 years. Assuming constant fertility we can forecast a population size of 86.9 million by the year 2000. Assuming a "low" growth rate, that is, assuming that the growth rate will decline dramatically so as to reach 1 percent per year by 1992, provides a projected population of 48.6 million persons by 2000 (Figure 1). In structural terms, the country has a very young population, 46 percent being under 15 years of age in 1966, up from 42 percent in 1956. The percent under 15 years will remain about 45 percent of the total population if fertility does not increase very much and if infant mortality continues to decline. It is estimated that the dependency ratio (population 0–14 and over 65 divided by population 15–64) was 101.0 in 1966 as compared with 65.8 in the United States. The sex ratio has changed from 104 males per 100 females in 1956 to 107/100 in 1966. Demographers and census takers believe that this figure is the result of an undercounting of females. Life expectancies at birth during the 1956–1966 period were 59 years for men and 50 years for women. The joint male-female figure for 1971 is estimated at 55 years. Birth spacing and infant mortality, like most other demographic variables, show a considerable urban-rural differential. Birth spacing averages 3.4 years in rural areas and 4.4 years in the capital. By way of contrast, the average period between births in France was 8.4 years in 1964. Infant mortality is variable too, being 80 per thousand live births in urban areas versus 120 in rural—a national average of 104 (Saxena 1972; Amani 1971; Nortman 1972, Table 4; UN 1971, TAO/IRA/60, pp. 26–31; 1966 census). Figure 2 compares recent and predicted birthrates in Iran, the United States, and Japan.

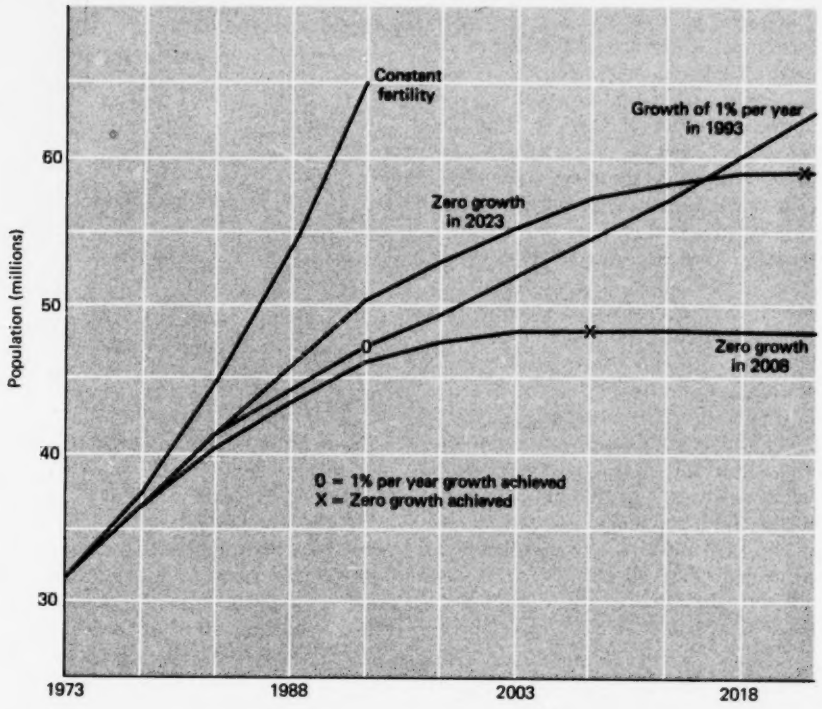
Role of Women

Although attitudes regarding women's status have been gradually improving in urban Iran, they remain more traditional in rural areas; rural areas have much lower rates of participation by females than do urban areas in education, employment, and health services. Literacy, infant mortality, expectation of life at birth, and other social data all validate this observation (UN 1971, TAO/IRA/60, p. 104). One of the first explicit steps to improve the status of women was taken by Reza Shah in 1935 with his proclamation allowing women to hold government jobs, attend universities, and join professions hitherto closed to them. In 1963 the present shah called for an amendment to the election law to give women the right to vote and to be elected to Parliament and other bodies. At the present time there are numerous women's organizations, and these, led by the National Iran Women's Association, are conducting a review of the country's laws to eliminate all vestiges of legal and actual discrimination against women and to ensure just enforcement of the laws in this regard. The Family Protection Law of 1967, currently being revised, is the principal legislation explicitly in support of women's rights. As in many other countries, there is still much to be done (Iran Almanac 1971, pp. 558–560).

Rural-Urban Distribution

Although Iran is still predominantly a rural country, the rural-urban ratio is changing rapidly. In 1966, 61 percent of the population lived in rural areas and 39 percent in urban, com-

FIGURE 1. *POPULATION ESTIMATES for Iran under four fertility assumptions (constant fertility, 1 percent per year growth achieved in 1993, zero growth achieved in 2008 and 2023). Source: Saxena 1972.*



pared with 69 percent rural and 31 percent urban in 1956 (1966 census). This distribution approximates quite closely the urban-rural ratio in most other Middle Eastern countries. While the population of the entire country increased by 36 percent during 1956–1966, the population of Tehran increased by 80 percent, and several smaller cities increased by over 60 percent. The overall rate of urbanization is nearly 7 percent per year, which means a doubling time of 11 years. By 1966 over one-fourth of the population of urban areas had been born in counties different from the ones they were living in; among younger adults the fraction was almost one-half for males and two-fifths for females. The most common age span for new urbanites is 23–34. Tehran, with its surrounding Central Province, is in every sense the heartland and magnet of the nation. It is estimated that Tehran, in addition to being both the capital and by far Iran's largest city (about 3 million inhabitants), contains: 41 percent of all urban literate women, 53 percent of the nation's physicians, 46 percent of its engineers, and 35 percent of its civil servants. In 1966 the Central Province contained over 35 percent of the entire urban population of the country. But like the country as a whole, water resources may prove to be the absolute limiting factor, and Tehran's maximum population capacity is thought to be 5.5 million (Amani 1971; UN 1971, TAO/IRA/60, pp. 101–104; 1966 census). In terms of health services, the following table indicates current rural-urban differentials (Taylor and Berelson 1971, p. 29).

Ten Largest Cities

According to the 1971 Iran Almanac, populations (in thousands of persons) of the ten largest cities in Iran are as follows:

Tehran	3,400
Isfahan	440
Mashad	425
Tabriz	420
Abadan	280
Shiraz	280
Ahwaz	215
Kermanshah	190
Rasht	150
Qom	140

Married women (15-44) per obstetrician	*Population per nurse-midwife*	*Deliveries with professional supervision (%)*
Rural		
31,000	92,400	5
Urban		
7,100	26,450	30

RELIGIOUS AND ETHNIC COMPOSITION

Most of Iran's population is Muslim; 90 percent of these are Shia Muslims, and 10 percent, Sunni Muslims. In addition there are 19,000 Assyrians, 190,000 Armenians, 24,600 other Christians, 67,800 Jews, 21,000 Zoroastrians, and about 100,000 persons of other faiths. Iran includes a number of tribal groups of different ethnic origins. The most important of these are the Bakhtiaris and Lurs, Kurds, Turkamans, Baluchis, Qashqais, and the Khamseh, each of which has its own culture and language or dialect in addition to Farsi, the official language used in all educational and other institutions (Iran Almanac 1971, pp. 527 and 575).

LITERACY

Iran's literacy is climbing rapidly from its former low level. There are also considerable male-female and urban-rural variations. As is to be expected, literacy is highest among urban males and lowest among rural females. It is noteworthy that the educational and other reforms of the present shahanshah have and are stimulating a rapid increase in literacy, assisted by a major UNESCO (United Nations Educational, Scientific and Cultural Organization) project in several regions. During 1956–

FIGURE 2. *BIRTHRATES, past and predicted, for Iran (assuming constant fertility), the United States and Japan. Source: Bourgeois-Pichat 1966.*

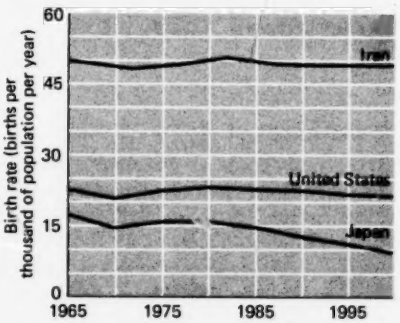


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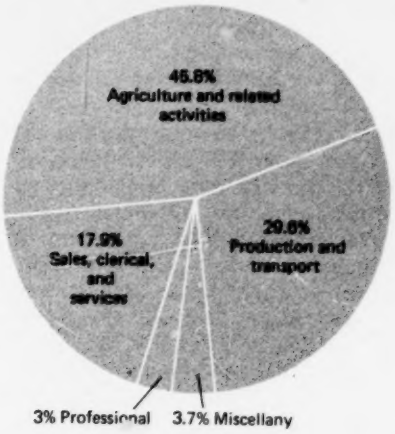
FIGURE 3. *ECONOMICALLY ACTIVE POPULATION according to the 1966 census was distributed as shown among various professional and commercial activities.*



1966 overall literacy (both sexes) increased from 15 to 30 percent. (In 1966 male literacy was 41 percent, and female literacy was 18 percent.) Total literacy values for urban and rural areas in 1966 were 51 and 15 percent, respectively (1966 census). In recent years, Iran has experienced an exceptionally rapid increase in school enrollment at all levels, especially the secondary. One imaginative approach to the literacy problem is the establishment of a Literacy Corps made up of young people called up for national service who ask to become teachers in rural primary schools. The number of children being reached by the corps is substantial and growing. Adult education is also receiving attention through the national campaign for the eradication of illiteracy and through the Literacy Corps and the Experimental Work Oriented Literacy Project. The latter project has covered over a quarter of a million adults up to the present time and, on an experimental basis, has been used to impart family planning concepts to the students (UN 1971, TAO/IRA/60, pp. 104–106).

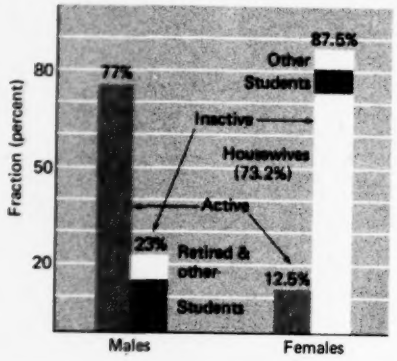
ECONOMIC STATUS

According to the 1966 census, about 46 percent of the total settled population aged 10 years and over (7.6 million) were economically active. Of this group, 87 percent were male and 13 percent female. These figures do not include female farming activity in rural areas. Of the active population in 1966, 45.8 percent were engaged in agriculture and related activities; 29.6 percent in production and transportation; 17.9 percent in sales, clinical, and service fields; 3 percent in the professions and technical areas; and 3.7 percent in miscellaneous economic activities (Figure 3). The majority of employed females (66 percent) live in rural areas and about half work in textile manufacture, including carpetmaking. In general, women may be said to participate economically in a minor way compared to men (1966 census). Figure 4 shows the male-female distribution by activity. But the economic picture is changing quite rapidly and this trend is expected to continue. Between 1956 and 1966 the number of persons employed in rural industries (agriculture, animal husbandry, forestry, fishing and hunting) fell from 56 percent to 46 percent and may now be no higher than 40 percent. It is estimated that within 20 years three-fourths of the work force will be employed in urban occupations. During the past decade per capita income and expenditure have both risen considerably. Per capita income is now $420 per annum, up from $193 in 1962 (Plan Organization of Iran 1968).

CONTRACEPTIVE KAP

The primary sources of data used here are a KAP (knowledge, attitudes, practice) study done in Tehran in mid-1971 (UNESCO 1971) and surveys taken as part of the Isfahan Mass Communications Project. As will be obvious, one major goal of the Tehran study was to compare the knowledge, attitudes, and practices of literate with illiterate women. Surprisingly, perhaps, most women (96 percent), whether literate or not, believe in the possibility of birth control by families. The study indicated that face-to-face communications (especially with family and friends) play a major role in awareness and learning about contraception and family size concepts. Family size ideals in Tehran range from 2.9 children for literate women to 3.2 for illiterate women. The family size ideal expressed here provides a remarkable contrast with current fertility behavior, which averages about seven live births per woman nationally.The most suitable marital age for women was thought to be 19.5 years and for men, 27 years.

FIGURE 4. *MALE-FEMALE DISTRIBUTION among economically active and inactive parts of the population over 10 years old according to the 1966 census.*



In the UNESCO study, both categories of respondents felt that birth control was justified by the need to educate children and for reasons of family finance, in that order. Less than 1 percent felt that birth control was never justified. Most women felt that the termination of childbearing or of pregnancy was a more compelling reason for using contraceptives than for child spacing (71.5 percent among literates and 66.8 percent among illiterates). More than two-thirds of all respondents reported a knowledge of some contraceptive method, although patterns of use appear to vary a great deal. *Coitus interruptus* is by far the preferred method, at 46 percent, in Tehran. Pills were used by 32 percent of the Tehran respondents, and 57.7 percent were using some form of contraception (69.6 percent of literates and 45.8 percent of illiterates).

The KAP findings in Isfahan are similar in several ways to the results obtained in the capital city. In Isfahan, 23 percent of the villagers sampled (against 11 percent of those in urban areas) believe that having children is solely in the hands of God. Also, most women have some awareness of Ministry of Health activities in family planning. As in the Tehran study, interpersonal communications were of major importance. Despite this finding, only 21 percent of the respondents claimed to have discussed family planning with their

spouses. Of these, 27 percent of the wives talked about wanting to stop having children. The number is generally consistent with the finding that 35 percent of Isfahan couples said that they had not wanted their last pregnancy. Not surprisingly, ideal family size is higher in this more rurally influenced area than in Tehran (4.1 children among illiterate village women and 3 among urban women). As in Tehran, over two-thirds reported a knowledge of some contraceptive method with *coitus interruptus* again the preferred method, at 24.3 percent of rural contraceptors. In Isfahan only 1 percent reported having an IUD, no one admitted to a vasectomy, and fewer than 1 percent of the women had undergone a tubal ligation. Thirty-five percent of couples surveyed expected to use a contraceptive method in the future.

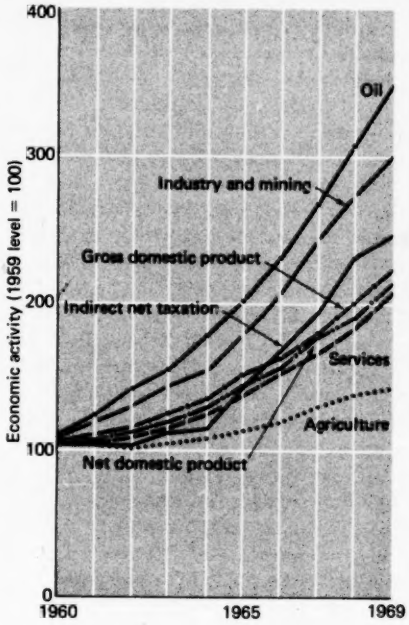
It is not clear to what degree these contraceptive KAP and continuation rates are typical of those in Iran generally, especially in rural areas. Clearly, a great deal more research is needed. To help fill this information gap, the Ministry of Health is planning several KAP surveys of national scope.

Population Growth and Development

National Economics

The current average economic growth rate is over 10 percent per year, one of the world's highest. Domestic savings amount to approximately 21 percent of gross national product (Bank Markazi 1970). Iran's share of the total value of its oil exports was increased substantially during 1971; meanwhile the annual exports of crude oil grow larger every year. This increase in output and revenue (currently more than $2 billion per annum) is expected to continue. Non-oil exports have shown a steady rise as well, increasing by 11 percent during 1971. Unfortunately for balance of trade, imports have increased almost as rapidly. Industrial production was up 13 percent in 1971. Although agriculture contributes the largest share of GNP, it has shown slow growth (2.6 percent per year during the Third Plan, 1963–1968) relative to other parts of the economy and thus has declined relatively as a source of national output (Iran Almanac 1971, pp. 225–260). Agriculture contributed 27 percent of GNP in 1965, when about 64 percent of the population were living in rural areas. It is estimated that by 1985 the agriculture share of GNP will be reduced to about 12 percent, with approximately 40 percent of the population still living in rural areas. Using past trends on yield per acre and amount of land under cultivation, it is estimated that the supply of agricultural products will increase 3.5 percent per year, reaching a value of 180 billion rials ($2.37 billion) for 1985. Using anticipated per capita income and moderate population estimates (a total population of 42 million) to calculate demand for food in 1985, one deduces a food shortage equal to approximately 170 billion rials ($2.24 billion) at 1965 retail prices (Ronaghy). In general, however, it may be said that Iran has a sound and growing economy led by oil exports that are based on long-term reserves. These oil revenues can help to underwrite the country's major development costs while rapid industrialization endeavors to provide jobs for the many jobseekers now and to come. Without a substantial reduction in the present population growth rate, however, additional agricultural, housing, employment, and social service needs will account for an ever-increasing share of the country's resources just to maintain the current quality of life. In the ECAFE (Economic Commission for Asia and the Far East) region it is estimated that a population growth rate of 3 percent per year requires an investment of 9 percent of the national income to maintain the standard of living. This assumes a capital output ratio of three (meaning that for each $3 of investment there would be a return of $1). Changes in the portions of the economy assigned to different sectors can be read from Figure 5, which shows the relative changes in Iran's major economic sectors during the 1960 decade.

FIGURE 5. *SECTORS OF THE ECONOMY and their changes from 1960 to 1969 expressed in terms of prices with 1959 values as the base. Source: Plan Organization 1971.*



Social Welfare Expenditures

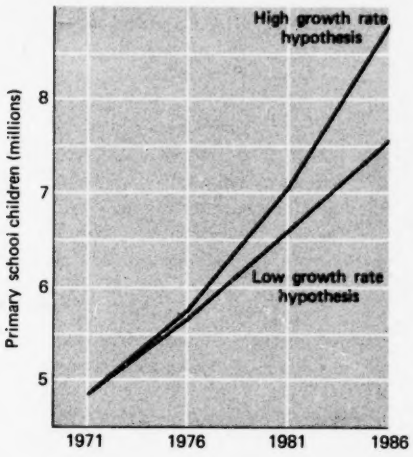
Education and Housing

The socioeconomic consequences of population growth can be illustrated by showing the effects of two rates of demographic growth. If we start with an assumed primary school age population of 4.847 million in 1971, rapid population growth leads to a primary school age population of 8.773 million by 1986; moderate growth provides a projected size of 7.527 million by 1986. Thus the difference between these two increases will be 1.246 million children of primary school age in 1986. Converting this to the number of primary school classes required (at about 30 students per class) indicates 292,400 and 251,000 classes and proportional numbers of teachers. The difference of 41,400 classes has obvious implications in terms of educational investment and manpower development (Figure 6). Estimating the housing needed can be accomplished by projecting the annual number of marriages. Assuming a constant marriage rate, it will be necessary to build 378,000 to 408,000 housing units in 1986, just to house newly married couples, not counting housing replacements due to deterioration (Amani 1971).

Health

Iran's health budget is 5 percent of the national budget, an annual per capita health investment of $4.83.

FIGURE 6. *PRIMARY SCHOOL CHILDREN according to two growth hypotheses. Source: Amani 1971.*



This is one of the highest per capita health expenditures in the developing world. Within the present fourth five-year plan (1968–1973), Iran plans to expand rural health services from a coverage of about 50 percent to 65–70 percent, including the establishment of 500 new rural health clinics. There are plans for a massive increase of hospital beds, addition of five new nursing schools and ten new schools for nursing assistants, and increased training facilities for midwives. The number of rural Health Corps units is to be increased to 450. Although the health funds for the fourth five-year plan have been reduced, the allocation for family planning has continued to increase.

The budgetary features of the family planning program are as follows: In terms of health infrastructure Iran has: 0.3 maternal-and-child-health clinics per 1,000 births (compared with 1.0 for Turkey and 0.2 for Punjab, India); 0.3 family planning clinics per 1,000 married women aged 15–44 (0.1 for Turkey; 0.3 for Punjab); 3.0 maternity beds per 1,000 births (2.7 for Turkey; 2.0 for Punjab); a population per physician of 4,100 (2,800 for Turkey; 3,400 for Punjab); a 15 percent professional supervision of deliveries (48 percent for Turkey; 40 percent for Punjab) (Taylor and Berelson 1971, pp. 39, 40).

Population Concerns

Traditional methods of contraception, including *coitus interruptus* and folk drugs and devices, have been known and practiced in Iran from earliest times. Current research and clinical experience suggest the extensive use of *coitus interruptus*. The condom appears to be the second most common nonclinical method. Oral and IUD contraceptives were introduced in the early 1960s, although the IUD has never gained the popularity of pills. The ratio of new pill to IUD acceptors is about 20/1. The possible reasons for this large difference may include: the limited experience of most doctors and midwives in the insertion of IUDs; the greater ease and shorter time for prescribing pills over inserting IUDs; the greater use-effectiveness of pills; the fairly widespread opinion that an IUD is not suitable for many women; the reluctance of rural women to accept a pelvic examination by a male physician; and the concern over the more obvious side effects of the IUD. Condoms, chemical methods, and diaphragms have never been strongly promoted, presumably because of their low use-effectiveness (UN 1971, TAO/IRA/60, pp. 59, 60 and 64, 65).

As in many countries, induced abortion has been practiced in Iran since ancient times. Abortion is currently illegal in Iran, however, except when the mother's life is in danger. Nevertheless, there is some evidence that the actual rate of induced abortion is between 15 and 25 percent of the total number of pregnancies. A survey of IUD acceptors in Abadan revealed that 23 percent of the women admitted to one or more induced abortions, and the actual figure may be higher. Prosecution for illegal abortion is extremely uncommon. Iran authorities are giving their close attention to future policy in this important matter. The Iranian medical profession appears to favor a relaxation of the current abortion law (UN 1971, TAO/IRA/60, pp. 66, 67).

Sterilization is not the subject of law in Iran but remains a matter between doctor and patient. The views on sterilization as a family planning method differ widely as do the formalities preceding the operation. Some form of written consent by wife and husband, with other undertakings designated to protect the operating physician, is usually drawn up. Most sterilizations have been tubal ligations rather than vasectomies, although the total numbers of both operations are insignificant from the demographic point of view (UN 1971, TAO/IRA/60, p. 68).

Population Policies

The first public instruction in contraception was given by maternal-and-child-health clinics set up in 1953, but these did not supply contraceptive materials. In 1957 the International Planned Parenthood Federation started to encourage family planning activities in Iran and supplied a number of Iranian volunteers with contraceptives, such as foam tablets, jellies, and diaphragms. In 1961 the importation of oral contraceptives was allowed.

The first official government interest in family planning dates from 1960. At this time his imperial majesty the shahanshah and the government began to be concerned about the rate of population increase following demographic studies based on the 1956 census that showed a rapid increase. The report of a population committee was included in studies preceding the third five-year development plan in 1963. In 1966 a Population Council mission was invited to write a report on the population problem, and several Ministry of Health officials were sent to study population problems in Egypt and Pakistan. Subsequently the government appointed an undersecretary for family planning in the Ministry of Health, and a few months later a specific plan with budgetary estimates was submitted to the government. This program, which aimed to use the maximal feasible fraction of Iran's physicians for part-time family planning services, got underway in April 1967.

The objective of the family planning program in Iran, as expressed in the fourth plan, is to promote "the physical, mental, social and economic welfare of families and in consequence that of society." In view of the serious influence of current rapid population growth on overall development of the country, the government adopted a more aggressive population policy in May 1970. The ultimate goal was to reduce annual population increase to 1 percent within 20 years. The Ministry of Health was called on to design a new national program en-

suring the coordinated involvement of all relevant government, nongovernment and voluntary agencies. The national tradition of numerous agencies providing medical and related social services including family planning makes this coordination function both important and difficult. The program is to emphasize flexibility and experimentation. The Ministry of Health is responsible for planning, organizing, and carrying out the family planning program. The major service aspects of the program are closely linked to the health and medical service system—especially maternal-and-child-health services—of the country. Basically MCH clinics are used as service points for contraceptive methods and the staffs are being trained in the management of clinical contraception. The overall objective is to have the Ministry of Health, other ministries, and nongovernment and private organizations provide contraceptive services wherever clinical facilities exist. These family planning services are also being introduced into hospitals providing maternity care and are being provided by various other government and nongovernment agencies.

The natality implications of current social-insurance, workers'-benefits, and income-tax policies have not been systematically examined, although the question is recognized as important by government officials and others. At the request of the government, an International Labor Office expert conducted a study of the Social Insurance Organization in 1971 (UN 1971, ILO/FPA/Iran/R.25). The study provides much needed information on this important question. In addition, the government is planning a project for the comprehensive study of Iranian law and population.

Support and Opposition

Strong and constant support for the family planning program has come from his imperial majesty the shahanshah. In 1967 he joined 29 other leaders in signing a Declaration on Population, which was presented to former United Nations Secretary General U Thant (World Leaders 1967). Since that time, the shah has spoken out several times about the need for limiting Iran's rapid population growth. There has also been general support of the need for birth limitation among other high Iranian authorities and opinion leaders.

In terms of acceptance of family planning by the majority of the population, there is good reason to believe that motivation and demand are already present to a considerable degree, especially in the more developed areas (UN 1971, TAO/IRA/60, pp. 92, 93, 191). Indeed, it is clear from clinic cards that only about 10 percent of contraceptive acceptors want any more children at all (UN 1971, TAO/IRA/60, pp. 5, 45). But the foregoing does not mean that education and motivation are unimportant. The education and motivation of low parity women, of those immersed in traditional attitudes, and of males remain a large and difficult undertaking.

Opposition to family limitation has been negligible, coming mainly from those who still believe that Iran has ample room for population expansion and those unaware of the rapidly falling infant mortality. But family planning has never been a controversial issue. Since 1966, when the national census confirmed the rapid population growth and demographers and economists pointed out the consequences for the society of unchecked growth, there has been a growing awareness of the need for family planning. In general, acceptance and practice of family planning probably are not so much a problem of opposition or support as of widespread lack of information and concern (compounded by misinformation) on the part of the elite and literate groups and of ignorance, fatalism, and apathy on the part of the rural and illiterate. That the status and literacy of women are low is not incidental to the problem. To the degree that the foregoing is true, it points up the critical function of the education and motivation job to be done (UN 1971, TAO/IRA/60, pp. 103, 104).

Religious Attitudes

A Tehran study in 1971 indicated that the majority of married women interviewed (63 percent) felt that birth control and family planning were acceptable practices within the Islamic faith; 67 percent of literate and 59 percent of illiterate women expressed this view (UNESCO 1971). As noted above, apathy, fatalism, ignorance, and status of women are probably more important than religion, as such.

Religious leaders in Iran generally accept family planning and use of contraceptives. On the other hand, statements by authoritative Iranian religious leaders have specifically opposed sterilization and any form of contraceptive that would result in abortion even from the very beginning of conception. Statements from religious leaders in other Islamic countries also prohibit abortion but only after the "quickening" of the embryo. It is not known whether the attitudes of religious leaders are changing on these points or what the influence of such attitudes is upon people's practices regarding contraception and abortion.

Population Program Activity

Objectives

The program is striving to achieve the psychological, social, economic, and physiological welfare of families through advising and assisting the public to control family size, that is, to help couples strike a balance between the number of children in a family and its socioeconomic circumstances. Within this general objective, the program seeks to achieve the following aims: reducing induced abortions, especially those without professional supervision; correlating the rate of population increase with per capita income; balancing the age structure of the population; increasing the economically active population of the country; and facilitating a reduction in the present population growth rate to levels commensurate with natural resources and socioeconomic goals. To accomplish these objectives, the Ministry of Health is: providing training to both medical and opinion leaders' groups; informing the general public; establishing family planning services in clinics throughout the country; conducting, supervising, and encouraging research in demographic, medical, and social sciences; extending contraceptive information and services to rural areas; providing supplies and technical advice; and arranging for international assistance wherever required (Iran, MOH 1971).

The UN "low" population projection for Iran estimates a population

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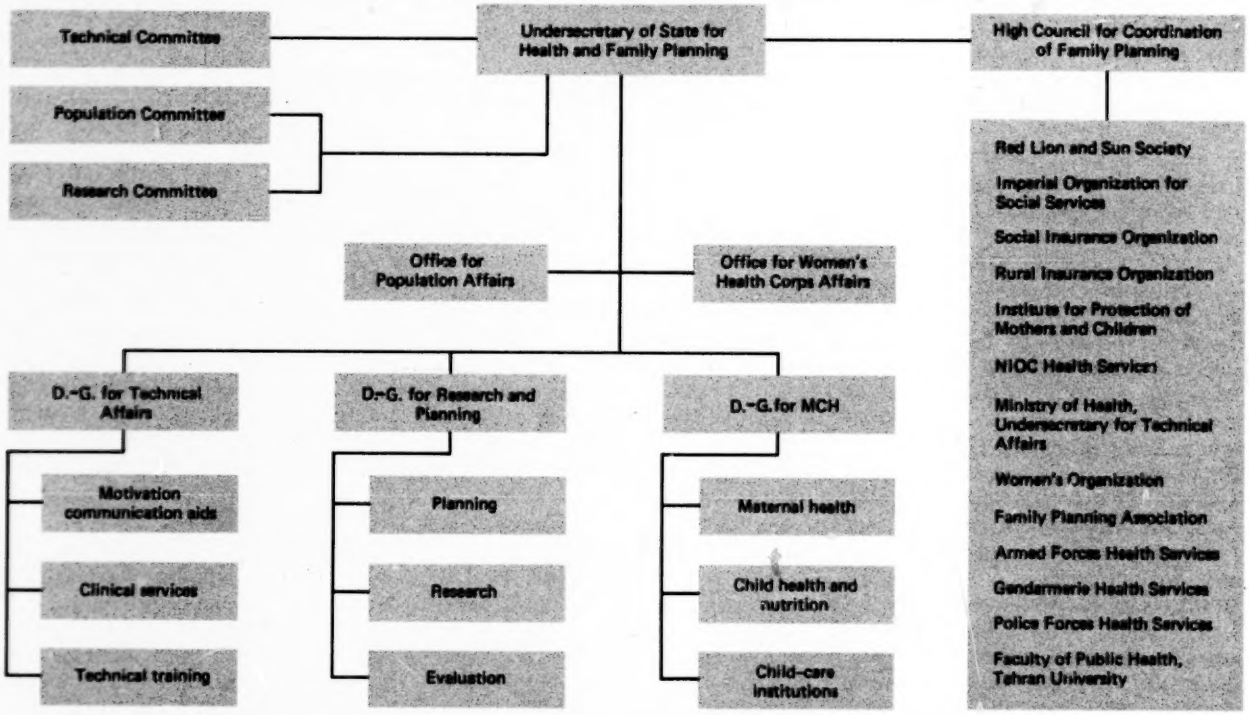
FIGURE 7. *FAMILY PLANNING DIVISION in the Ministry of Health is organized in five major units. The undersecretary at the head is responsible for planning, coordinating, organizing, and implementing the program.*



in 2000 somewhat greater than the 48.6 million accepted by the government, a population growth rate of 1 percent by 2010, and a stable population in the 100–125 million range. To achieve these figures will require averting 250,000 births a year by 1975, half-a-million annually by 1980, and 750,000 by 1985. These numbers work out to be about 50,000 extra births averted each year or a new gain of about 150,000 effective contraceptors each year. To meet the target of 1 percent growth rate by 1990 would require rates of acceptors, effective practice, and births averted nearly twice those required by the UN "low" projection (UN 1971, TAO/IRA/60, pp. 32–37).

OPERATIONAL POLICY

That the program is being implemented through existing health and clinical facilities means that introduction of family planning functions calls for employment of existing technical staff on a part-time basis and of additional staff for motivation, home visits, supervision, and record keeping. Follow-up of new acceptors, regular home visits, and more convenient access to supplies and services are gradually being added to the program and are expected to improve acceptance and continuation rates. Preventive health care, including family planning, is provided free of charge, although a small registration fee (about $0.20) is usually requested from clients who can afford it. On the question of incentives, the current policy of self-motivated and voluntary acceptance of family planning is expected to continue. Thus incentives to field staff and local functionaries for referrals and contraceptive distribution, and subsidies to private physicians for IUD insertions, are not currently awarded except on an experimental basis.

One important function of the Ministry of Health is to set standards and secure an even national distribution of resources and services. The rapid development and complexity of the national effort make it imperative to achieve common basic patterns as to categories and numbers of staff, equipment and drugs, management of contraceptive services, follow-up, records' management, field worker productivity, etc.

The ministry has delegated to a nonprofit company the purchase and supply to government health centers of condoms and drugs including oral contraceptives. Iranian governmental and private organizations that have their own supply distribution system —and some that do not—are also provided with pills through this channel. Intrauterine devices (Lippes loops) are being provided to the ministry by the Population Council and distributed to clinics free of cost. Some condom supplies have been provided by the Swedish International Development Authority. Three different brands of oral contraceptives are used in the program: EUGYNON, VOLIDAN, and LYNDIOL (2.5), the latter two being manufactured locally. Other common brands are available on the open market. Brands of oral contraceptives that include placebo tablets to assist women in maintaining an unbroken contraceptive regime are also available commercially.

FAMILY PLANNING ORGANIZATION

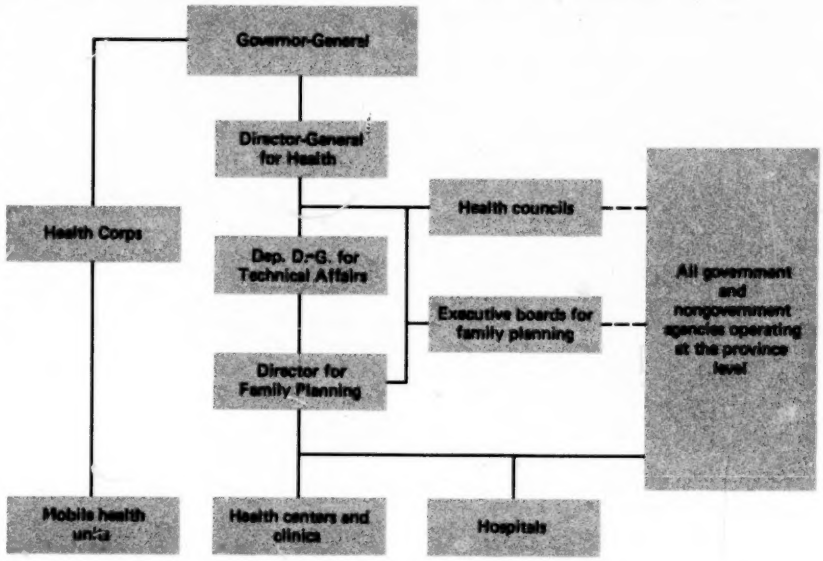
As noted above, the government has given to the Ministry of Health the responsibility to plan, coordinate, organize, and implement the family planning program. These functions

have been delegated to a special division in the ministry headed by an undersecretary of state for health and family planning. This position is held by his excellency, Dr. Amir Mansour Sardari, formerly director-general of medical services in the Ministry of Roads and Communications and a senior professor on the faculty of medicine at the University of Tehran. The division is organized into the major units shown in Figure 7.

The Family Planning Division works closely with other parts of the Ministry of Health to ensure coordination and obtain technical assistance in such activities as health education. One result of this coordinated approach has been the strengthening of division capacity through the transfer to it of the ministry's maternal-and-child-health unit and the entire Women's Health Corps.

The central ministries are represented at the provincial level by directors-general. The Family Planning Division is represented in the provincial health departments. The government policy of decentralization provides for coordinating the work of the different ministries under the governor-general of the province and for reducing with all deliberate speed their current vertical responsibilities to the central ministries in Tehran. Many nongovernmental and private agencies also have branches in the provinces that report to their headquarters in Tehran. In the provision of health and family planning services, the director-general of each provincial health department has a key position, assisted by a director for family planning. The director-general is the head of the public health service of the province and the executive officer of its health councils, a committee of appointed and publicly elected members concerned with community health services. He is also the head of the provincial branch of the Imperial Organization for Social Services and a member of the provincial council of the Red Lion and Sun Society. On the basis of personal interest and commitment the director-general for health serves as coordinator for all family planning services in some provinces. The personnel of the Family Planning Division maintain a liaison and working relationship with this important official. The provincial director for family planning is appointed by the director-general for health. Decision making on most matters of substance is done by family planning officials at the center, often by the undersecretary himself. Such decisions are based in varying degrees on information provided by provincial staff. The structure of the Provincial Health Organization for Family Planning is shown in Figure 8.

FIGURE 8. *PROVINCIAL HEALTH ORGANIZATION FOR FAMILY PLANNING is headed by the governor-general of the province. The director-general for health is assisted by a director for family planning.*



ROLE OF OTHER ORGANIZATIONS

Revolutionary Corps

One of the principal innovations of the shahanshah's White Revolution of 1962 was the use of two-year conscripts in the military service to implement social reform and development activities. After a period of basic military training, conscripts are assigned to various corps such as the Literacy Corps, the Health Corps, and the Extension and Development Corps. Corps members are sent throughout the country to teach; build roads, bridges, and schools; improve sanitation; and generally to aid in the development of better standards of life in the rural areas. The promotion of family planning has now been added to their duties, following 8 to 12 hours of instruction on family planning. Although the Literacy Corps family planning activities are limited to disseminating general information, corps members played a crucial role in the Experimental Work Oriented Literacy Project, which introduced adults to family planning concepts. The Health Corps plays a more direct role, mainly through its distribution of oral contraceptives and condoms by its mobile units operating in rural areas. Also, as noted above, the entire Women's Health Corps has been assigned to the Family Planning Division and plays a direct role in the Health Ministry efforts to deliver family planning information and services. Research is required to find out how consistently and enthusiastically Revolutionary Corps members actually promote family planning and how many contraceptive acceptors may be attributed to their efforts.

Other Ministries

The Ministry of Education, in cooperation with the Ministry of Health, has introduced population education material into the junior high and high school biology and social studies curricula. Material prepared for primary schools also deals with the elements of reproduction and the family. At the university level the nonmedical faculties now include in their syllabuses a wide range of social science and biomedical subjects directly related to reproduction and family

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planning. The ministries of Labor, Housing and Development, Agriculture, and Land Reform also include short courses on family planning in general training programs, and they encourage their staffs in the field to disseminate information on family planning. The Ministry of Labor, through the Workers' Insurance Scheme, is charged with providing health and medical services to wage earners, usually industrial workers, and their dependents.

Other components of the government provide health and medical care for discrete groups. These include the armed forces, the gendarmerie, and the police forces, which provide health services for their personnel and families. The National Iranian Oil Company and its associate subsidiaries have an extensive program and network of health and medical care facilities for employees and their families.

Coordinating Bodies

The principal coordinating body at the center for the major organizations engaged in family planning–related activities is the High Council for Coordination of Family Planning. The council meets under the chairmanship of the undersecretary of state for health and family planning. The following government and nongovernment agencies are represented on the council: Armed Forces Health Services, Gendarmerie Health Services, Police Force Health Services, Red Lion and Sun Society, National Iranian Oil Company Health Services, Imperial Organization for Social Services, Institute for the Protection of Mothers and Children, Family Planning Association of Iran, Ministry of Labor Insurance Organization, Ministry of Land Reform, Rural Insurance Organization, and the National Women's Organization. Since the council has met only infrequently, it is premature to speculate on how effective it may be in its coordinating role.

At the provincial level there are, in addition to the coordination provided by the director-general for health, two principal coordinating bodies: local health councils and the county (shahrestan) level executive boards for family planning. Membership of the health councils is made up of elected and appointed officials and prominent citizens. These councils perform an information and advisory function regarding community health care but principally act as aggregators and disbursers of health and family planning funds received by that body. Health councils, untrammeled by the normal exigencies of civil service and in close touch with local needs, provide an extremely important source of program flexibility. Executive boards for family planning are currently being established in counties throughout the country. The purpose of these boards is to maximize the flow of information among important officials and family planning–related agencies in each county. The provincial director for family planning attends each of these meetings.

Program Operations—Delivery of Services

The major problem of family planning in Iran is to reach not only the country's urban population but also its 50,000 villages, many of which are in remote areas. To meet the demand 1,529 clinics were operating by mid-1971, 79 of which were opened in the first three months of that year. A variety of government and private organizations operate these clinics. The Ministry of Health itself operates 678 clinics. The other 851 are divided among the following organizations: Health Corps (mobile units) 397; Imperial Organization 249 (both are major operators of rural clinics); educational institutions 22; Social Insurance Organization 43; Imperial Armed Forces 82; National Iranian Oil Company 9; Women's Organization 23; Red Lion and Sun Society 16; charitable organizations 6; others 4. Most of these clinics are in urban areas and very few are primarily devoted to the delivery of contraceptive services. To expand clinical services in rural areas, 37 mobile family planning clinics were made operational in 1971. These mobile teams, together with Health Corps units, operate as extensions of the stationary clinics for health and family planning (Iran, MOH 1971). Implementing the program through these existing facilities has given it—for the time being at least—a clinic versus a field delivery orientation. This orientation means that most clients have to go to clinics for services, for checkups, and for new supplies and contraceptives, usually one cycle of pills at a time. Acceptors of oral contraception are expected to return for reappraisal and supplies each month. Routine visits following IUD insertions involve three initial revisits during the first two months and then a revisit every three to six months (UN 1971, TAO/IRA/60, p. 59). Some large health centers have a special location to which the clients are referred for more comprehensive advice and for contraceptives, after receiving information about family planning by the regular maternal-and-child-health staff at the clinic. Agencies are being encouraged to offer extra clinic hours in the evenings exclusively for family planning to reach clients who are unable to attend the clinics during normal working hours, that is, mornings and sometimes early afternoons.

Although information and education campaigns are used periodically throughout much of the country, mainly focused on urban areas, it is fair to say that client recruitment, as such, has only rarely been attempted. However, the maternal-and-child-health clinics are heavily utilized by the public, thus coming into contact with family planning information and services in a positive, health-oriented contest (UN 1971, TAO/IRA/60, p. 72). The expanding education, motivation, and extension services of the program are expected to result in increasing numbers of health and family planning clients in the rural areas.

Personnel

The great majority of family planning workers do not have to be recruited and paid for by the Family Planning Division. The principal relationship between the division and the many medical and paramedical personnel who man the clinics is that of trainer, advisor, standard setter, motivator, contraceptive supplier, planner, and coordinator. In addition to the more than 700 Health Corps girls working in clinics and as field personnel, social workers and field workers with special training in family planning information and motivation are employed to work directly with the clients in health centers and for follow-up visits. Also employed in the clinics are nurses' assistants (behyars). The

program employs four categories of motivators: Women's Health Corps, ex-corpswomen now employed, young women employed as community workers, and locally hired personnel. A special category of field worker is being developed of married women 25–40 years of age with at least six years of schooling recruited from the areas where they will work. By mid-1971, 455 workers of this kind had been trained and posted. Assuming that a single field worker can visit 100–200 acceptors every month, the program currently requires at least 1,500 such personnel. By the end of the next five-year period (1977), a total of 5,000 will be needed (Iran, MOH 1971; UN 1971, TAO/IRA/60, pp. 62, 63). The Health Corps units are staffed by male physicians and assistants. The staff for each of the 30–40 mobile family planning units consists of a physician or midwife, a nurse assistant, two motivators (usually Health Corps girls), and a driver (UN 1971, TAO/IRA/60, p. 58). The typical city clinic consists of a doctor, midwife or nurse, one nurse's aide, three members of the Women's Health Corps, and a servant.

The government plans to increase the number of paramedical village and clinical personnel—particularly midwives—and to encourage the delegation of less complex and demanding tasks to the lowest possible staff level. Also to be substantially increased are the numbers of home visitors and motivation personnel: Health Corps girls, "mature" field workers, social workers, and supervisors. The government is also concerned with determining and establishing optimal staffing patterns and delivery systems for all types of outlets throughout the country. As noted above, local functionaries (village heads, traditional midwives, and others) are being considered as sources of referrals and as distributors of contraceptives. Condoms are available at the Ministry of Health clinics and commercially but are not regularly available at clinics belonging to other organizations. To increase the availability of condoms the Family Planning Division is working on new techniques for increasing the delivery of condoms throughout the country. The use of chemical methods and diaphragms is insignificant.

Postpartum Program

The Farah Maternity Hospital in Tehran, one of the world's largest, is a participant in the International Postpartum Program sponsored by the Population Council. This international program now includes about 250 hospitals. About 40,000 delivery and 6,000 abortion cases were admitted to the Farah Hospital during 1970. At discharge, 60 percent of the patients show a positive interest in adopting some contraceptive method, although only 15–20 percent of these women return to receive services. In addition, a number of nonpostpartum women hear of the contraceptive services and come to the hospital for them. The hospital has approximately 120 deliveries per day and has a daily attendance at its family planning clinics of 60 new acceptors, of which 40 are nonpostpartum. It is expected that the number of new and continuing acceptors will increase if those initially interested in contraception are subject to regular home visits and the continuance of maternal-and-child-health services. It is interesting to note that there has been a drop of five years in the average age of acceptors since the program began in 1966. The Farah Hospital is run by the Institute for Protection of Mothers and Children, a nongovernmental organization financed primarily by a special gasoline tax (UN 1971, TAO/IRA/60, pp. 70–74). The recognized value of a postpartum program and the success of the Farah postpartum effort has encouraged the Family Planning Division to offer regular postpartum and MCH-related contraceptive services at a number of additional hospitals. The division, with international assistance, is now implementing a plan to introduce organized maternity-centered family planning services initially in five hospitals and eight MCH clinics in different parts of the country. These comprehensive services will be expanded gradually to include all maternity hospitals and services by 1975. A national coordinating and advisory committee, formed by representatives of all agencies and organizations providing maternity care services, is to be established to plan, direct, and oversee the implementation of this effort. The undersecretary of state for health and family planning will preside over the committee.

Training

It is manifest that basic to the implementation of the national family planning effort is an adequate, continuing supply of trained personnel: medical (doctors and nurses); administrative and supervisory; functional specialists (information, motivation, education, and technical); paramedicals (nurses' assistants, assistant midwives, and rural midwives); and field staff (home visitors, motivators, and public educators).

At this writing the Family Planning Division operates a number of training centers in different parts of the country to supply these people. The oldest and largest of these is the Firouzgar Center in Tehran. In addition to short orientation courses in the provinces, the Firouzgar Center offers various intensive family planning training courses for many of the medical, paramedical, and field personnel who will be performing family planning functions within the governmental or nongovernmental context. By mid-1971 this and other Tehran centers had trained the following personnel in relevant family planning courses for up to three weeks per student:

Physicians, nurses, and midwives (three-week course)	1,350
Physicians of the Imperial Organization	254
MPH graduates specializing in family planning	36
Health Corps	
Male doctors and aids	4,500
Women	1,780
"Mature" field workers (women)	455

In addition, large numbers of personnel from other governmental and nongovernmental agencies, plus a limited number of private practitioners, have received training in, or at least exposure to, family planning subjects.

A partial list of this training follows:

Literacy Corps. Over 40,000 male recruits have received nine hours of training in family planning arranged by the Ministry of Education in cooperation with the Ministry of Health.

Extension and Development Corps. Both men and women members of this corps receive nine hours of family planning instruction as part of their general training. More than 5,000 workers had received this training by mid-1971.

Home Economic Agents. Five hundred married women employed by the Ministry of Housing and Development to teach village women have received 12 hours of family planning instruction during their training.

Cooperative Society Supervisors. Agents employed by the Ministry of Land Reform to supervise the establishment of cooperative societies in rural areas have received six hours of instruction in family planning. Approximately 1,000 had been so instructed by mid-1971.

Women's Association. Over 500 of the association's volunteer workers in health, education, and welfare areas have taken three-day courses on family planning. Many others have attended family planning briefings at the provincial level (Iran, MOH 1971).

The Family Planning Association of Iran, a pioneer in the nation's family planning effort, has for some years conducted training for volunteers, and has operated a few clinics in the low-income areas of Iran.

By mid-1971 there were seven training centers for rural midwives, with eight additional ones to be established during 1971–1972. Each center has a capacity of ten students at a time. Five additional technical training centers are to be established during 1971–1972, beginning with one additional center in Tehran and one in Isfahan. General training will continue to be conducted at the provincial level (UN 1971, TAO/IRA/60, pp. 77, 78).

In addition to the above, many of the professional staff in the overall family planning effort—governmental and nongovernmental—have attended domestic and international university courses, conferences, and workshops, and have taken a number of fact-finding trips to countries with active family planning programs. The government is also beginning to respond to the need for increased staff skills in system analysis, action programs, and implementation techniques, that is, in management.

New training initiatives include: training more resource persons—teachers and staff—to expand training capacity; a training program for private physicians in concepts, procedures, and techniques of family planning; a new training program for traditional birth attendants to facilitate their participation in the program; and more practical training in maternal and child health and family planning for medical students, student nurses, and midwives in hospitals and maternity homes.

Communications and Education

The two major tasks of the national family planning program are to deliver information and services to Iran's population. For information, the Family Planning Division established a unit for motivation and communication two years ago as part of its technical affairs section. At present the communication activities of the division consist mainly of production of public displays such as graphs and calendars, preparation and showing of family planning films, production and distribution of leaflets and pamphlets, and publication of family planning bulletins in both Farsi (monthly) and English (quarterly) with a total circulation of over 50,000. Radio and television are the newest and potentially most useful media in the program—which still basically relies on face-to-face methods of contact and communication—and the division is beginning to make greater use of these. Several films and film strips have been produced for television and cinema. The division is setting up its own printing facility to produce large quantities of leaflets and posters for different audiences and purposes

The division is also developing its own staff of education and communications officers to work in the field. A network of mobile education and communications units, each manned by a health or family planning education officer, an assistant, and a driver, is being developed to operate out of smaller cities. These units will serve these small urban areas and, where possible, reach out into rural areas. Their task is to promote, arrange, and coordinate communications for adult education and social welfare through all existing channels. The division hopes to have about 80 such units in operation during 1972 and to increase the number to 150. In addition, the division plans to put at least 27 mobile audiovisual units into the field, seven of them by the end of 1972. They will support training and communications at different levels. They will be equipped to project films, film slides, and strips and to broadcast sound recordings in local dialects. Each unit will be manned by one education and communications officer and one driver-projectionist (Iran, MOH 1971; UN 1971, IRA/TAO/60, p. 82; UNFPA 1971, Annex 7). In June 1970, with the help of the Population Council and the Ford Foundation, the division cosponsored, with the University of North Carolina, an international workshop in Tehran on communications and family planning. The workshop was attended by participants from 18 countries and a number of international organizations. Participants undertook to prepare for their respective countries detailed schedules of production materials in family planning education and communication (Blake 1971).

Population Education

Iran recognized the need for developing a population education program at an early point in its own population effort when the ministries of Health and Education initiated an ambitious program of public school curriculum and textbook revision for population education. Today most textbooks in Iran's junior and senior high schools contain material on population education. The Family Planning Division followed up the initiation of curriculum and textbook change with a program designed to introduce and explain population to the country's public school teachers. During the summer and fall of 1971 the division held many seminars throughout the country to bring this new educational effort to the teachers who would implement it. Over 20,000 teachers attended these one-day seminars. The third major initiative of the Family Planning Division, an extensive and carefully structured seminar on population education, was held in the spring of 1972. In preparation for these sessions, the division organized

a series of study groups that met weekly from October 1971 to January 1972 to determine necessary revisions in the entire public school curriculum, look into functional literacy, develop a plan of effective teacher training, and grade material on family life education (with an emphasis on sex education) into different educational levels. Work groups on each of these subjects included senior representatives from ministries (Health and Education), teachers' colleges, the University of Tehran (faculties of Education, Social Sciences, and Public Health), and religious leaders. The reports completed by these work groups formed the basis for discussions at the seminar.

In addition to the above major activities, the Family Planning Division is laying plans to establish a comprehensive Population Education Bureau. Because of the multifaceted nature of the subject matter, this bureau will require the maximum feasible cooperation from all relevant agencies. Accordingly, the planning discussions are being conducted in close cooperation with the Ministry of Education.

Isfahan Project

To gather information about the effect of communications on people's knowledge, attitudes, and practices of family planning, a large-scale mass communications project was initiated in December 1970 in Isfahan province with the assistance of the Population Council (Iran, MOH, Isfahan report 1972).

The objectives of the project were to:

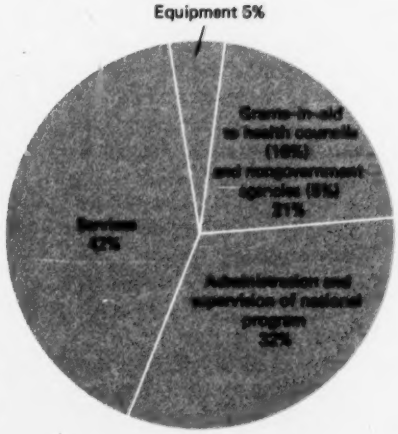
- conduct a before-and-after baseline survey of knowledge and practice of family planning
- measure rates of acceptances at clinics before and after the experimental treatments.
- pretest and produce radio programming, newspapers, magazine advertisements, cinema film strips, posters, mailings, leaflets, exhibits, and tapes for sound trucks
- conduct a campaign using radio for three months and then combine radio with all other mass media for three months
- determine the potential use of functionaries such as Revolutionary Corpsmen, teachers, religious leaders, village heads, private physicians, and others
- conduct a maximum contact effort in one urban and several rural settings using full-time workers and functionaries conducting home visits and group meetings.

The Mass Communications Project was conducted from December 1970 to March 1971. Before the campaign three months of radio programming had raised acceptance rates 34 percent. The mass campaign increased acceptance an additional 30 percent, for a net increase of 64 percent. The number of patients returning to the clinics for additional supplies increased 101 percent during the six months. During the latter part of the campaign a survey showed that 87 percent of those interviewed recognized the project slogan, "Two or three children is better; the loop and pill are safe." In the two districts where functionaries were employed, acceptances increased 115 percent. Also, in the urban and rural intensive project areas, every household in this population of 20,000 was visited three times by family planning workers. Although not necessarily related to contraceptive practice or fertility, there was a decline in ideal family size from 3.9 to 3.0 in one rural area and a decline of from 3.5 to 2.3 in the urban areas. In cooperation with the Iran-UNESCO Literacy Project, the Isfahan Program also included family planning content in the literacy texts for villagers (Fattahipour 1972). The postsurvey, media expansion, functionary, and intensive project features of the Isfahan project are expected to continue in 1973.

Budget and Program Costs

The amount originally allocated to family planning by the Plan Organization was 500 million rials (US$6.7 million) for the fourth five-year development plan (1968–1973). A review of the dimensions of Iran's potential population problem led to a review of the population policy by the High Plan Council in 1970 and to a more aggressive programmatic effort. The budget allocation for the fourth plan was quadrupled to 1.5 billion rials, the additional amount to be spent over the three final years of the plan. Thus, for 1970–1971, the program was allocated 3.5 times the amount for the previous year and a much expanded program for 1971–1972 is underway. Family planning funds from the Plan Organization, which derive from oil revenues, are supplemented by salary and other overhead monies received from the parent Ministry of Health. With Health Corps and cooperating agencies, both public and private, contributing substantially from their own funds, and with increasing amounts of foreign grants, family planning enjoys considerably higher support than the above plan figures indicate. Historically, the Plan Organization budget has increased from US$600,000 in 1968–1969 to about $5.4 million for 1971–1972. It is likely that at least a comparable amount is being expended by other agencies through other budget commitments—a total of at least $10–12 million. The government budget provides for grants-in-aid to about 150 health councils to increase family planning activity at the local level. Nongovernmental organizations such as the Imperial Organization, the Red Lion and Sun, the Women's Organization, the Institute for the Protection of Mothers and Children, and the National Organization for Family Welfare are also given grants-in-aid. Contraceptives are provided from Ministry of Health funds as are training and operational aids (Iran, MOH, FPD 1971; Namazi 1970; UN, FPA 1971). Figure 9 shows the 1971–1972

FIGURE 9. *EXPENDITURES by the Ministry of Health Family Planning Division in 1971–1972 were distributed like this. Source: Iran, MOH 1971.*


Equipment 5%
Grants-in-aid to health councils (16%) and nongovernment agencies (5%) 21%
Services 43%
Administration and supervision of national program 32%

distribution of expenditures by the Family Planning Division of the Ministry of Health.

Program Evaluation

An evaluation unit headed by an experienced public health physician was formally established in the Family Planning Division late in 1970. After a request to the UN, an expert on demography was assigned to the unit to help improve the service statistics, KAP survey, and evaluation system of the program. When new patients are enrolled at a clinic (Ministry, other governmental agency, voluntary, and most private clinics) an acceptor card is completed and a duplicate sent to Tehran. Complete records of women who fail to return to the clinic are reviewed, thus allowing a comparison of dropout cases with new cases. New acceptor cards and dropout records are analyzed at periodic intervals by the central evaluation unit. In addition, KAP surveys and other family planning–related studies, done either by the ministry or other personnel, are reviewed for their relevance to the program. One problem that has emerged is the great difficulty in locating acceptors for follow-up purposes from the addresses provided on the clinic cards. For this and other reasons, a new clinic card is currently being developed. To improve the evaluation system further, a one-month ECAFE-sponsored evaluation workshop was held in Tehran during November–December 1971 for 30 field staff. With the conclusion of the workshop the staff members returned to their provinces to form the basis of a much more rigorous and efficient national family planning evaluation system. Keypunch and tabulating equipment provided by the Population Council permit ready computerization and analysis of national service statistics. The Population Council also provided, during 1971, the short-term services of an evaluation expert to work with local staff on the design of the augmented statistics and evaluation system.

Research

Biomedical

Some biomedical research is being carried out, mainly in the country's universities, and the government intends to develop or strengthen research on the biomedical, clinical, and epidemiological aspects of human reproduction. With this in mind the government is considering a central, multidisciplinary institute for research in human reproduction and population dynamics and for postgraduate research training. It is anticipated that such an institute will help guide the planning and implementation of the family planning program. The government is also considering ways to develop and encourage research in the nation's universities and other educational institutions through a grant allocation system.

Demographic

Although the country has developed some capacity for research, censuses, and statistical evaluation, there is much to be done to strengthen and expand these efforts. This will be done through a more carefully designed and more frequent census, a streamlined annual demographic survey, improved registration, and special studies.

Knowledge, attitude, and practice

A surprising number of KAP studies have been conducted in Iran, beginning in 1965. The latest was sponsored by UNESCO in August 1971 (UNESCO 1971). A special KAP study of Iran's private physicians was completed by the Family Planning Division and released early in 1972. It is expected to provide a wealth of interesting data. A large-scale, national KAP study is currently being planned by the division staff. Other special KAP-type studies are planned, for example, of teachers, paramedical personnel, and industrial workers.

Family planning delivery

One of the most critical but least researched areas in family planning in every country, Iran included, is delivery of family planning services. As of late 1971, the Family Planning Division was developing three studies to provide insights into techniques in this area. Two are comparative, one to evaluate the relative performance of clinics in Tehran with those in other urban areas, and the second to evaluate the relative performance of the Ministry of Health clinics with those of other health agencies. The third study, being developed by a UN expert in demography and a population intern from the University of Michigan, in collaboration with Iranian counterparts, is a cost-effectiveness analysis of clinic performance in terms of the characteristics of the setting. In another contemplated study, complementary to the three just mentioned, the division will try to assess the performance of various categories of field workers in a variety of geographical and organizational situations together with the effect of training on performance.

Program Effect

The table shows the record of contraceptive acceptors and distributed supplies between 1967 and mid-1971. From the number of pill cycles distributed, usually a cycle at a time, the Caradon mission (UN 1971, TAO/IRA/60) calculated that about 37 percent of the new clients in the preceding 25 months were continuing. Similarly the continuation rate becomes 34.5 percent over the entire 31-month reporting period enumerated in the table if it is assumed that 80 percent of all new clients during the final six months were also prescribed pills. In addition, many of the estimated 90,000 pill cycles sold monthly through commercial channels (an 18-fold increase since initiation of the program) undoubtedly went to sometime acceptors at a reporting clinic.

It is nearly impossible at this stage to calculate continuation rates for IUD and condom users. Although IUD expulsions and removals reported by clinics amount to 25 percent of all insertions, these are probably only a small fraction of the dropouts.

A follow-up survey of Farah Maternity Hospital family planning acceptors indicated adjusted 12- and 24-month continuation rates of 33 and 23 percent, respectively, for the pill, 38.5 and 27.5 for the IUD, and 34 and 23 for all methods. The 12- and 24-month figures for all acceptors still practicing some contraception are 46 and 34 percent, respectively. These figures are for Tehran. Outside the capital probably fewer women who discontinue the contraceptive

Iran family planning results for 1967-1971 in six-month intervals

Fixed clinics[a] reporting and total	*Month*	*Patients seen*	*Condoms distributed[b]*	*IUDs inserted[c]*	*Pill cycles distributed[d]*	*New pill patients[e]*
160	April 1968	15,361	—	797	8,588	—
235	Oct. 1968	39,653	—	848	27,691	784
400/444	April 1969	84,399	—	845	72,501	17,260
469/554	Oct. 1969	120,710	—	1,175	105,520	19,110
574/683	April 1970	151,807	4,411	1,320	134,405	22,226
775/981	Oct. 1970	183,322	4,983	941	169,509	24,907
917/1,068	April 1971	231,798	8,168	1,220	212,957	31,606
1,056/1,200	Oct. 1971	268,538	9,703	1,001	251,628	34,293

[a] Health Corps Units are included in this table.
[b] In dozens. Earlier figures not cited because of inaccuracy.
[c] Up to March 1968 approximately 10,000 IUDs were inserted. Total insertions since January 1967: 61,557, expulsions, removals, and reinsertions excluded.
[d] In addition, commercial sales have increased from about 50,000 in March 1968 to about 100,000 in July 1971.
[e] Figures prior to September 1968 not available.

pill resort to another reasonably effective method.

The foregoing figures mean that, given present dropout rates, if every woman in the country were contacted by the program, the birth rate would not fall below the range of 36–40 births per 1,000 per year and completed fertility would not fall below 5.4–5.9 live births per woman. Iran cannot reach its target of a 1 percent annual growth rate unless the birthrate is reduced to 20 and completed fertility to 3 (assuming continued mortality decline). That is, given present continuation rates, the program will have only 37 to 24 percent of the effect required to reduce completed fertility to 3, even if all women practice contraception perfectly, an unrealistic assumption (UN 1971, TAO/IRA/60, pp. 38–45). It is clear that a combination of continuing contact, education, and remotivation on a massive scale, together with adoption of all available methods of contraception and birth limitation, will be required to meet the national target. Clinic figures for a one-month period in the fall of 1970 showed that the Ministry of Health clinics account for 75 percent of all family planning clients (141,000 out of the 188,000 total); 71.5 percent of all new clients (20,800 of the 29,000 total); 13 percent of all pill cycles; 58.6 percent of all IUDs inserted; and 84.2 percent of all condoms. Closest to the ministry in terms of total clients is the Farah Maternity Hospital at 4.7 percent. Closest in terms of new clients is the Health Corps at 4.6 percent (UN 1971, TAO/IRA/60, pp. 128, 129).

Private Agencies

The Government of Iran seeks to increase the provision of family planning information and services to couples and thus ultimately to produce better family health and higher living standards for millions of families (UNFPA 1971). The goal of an appreciable reduction from the present high fertility has been emphasized, of course, throughout the government's program. In the management and operation of the population programs presently underway in the country and those that are shortly to be implemented, the government relies in part on the expertise and organizational structure of a number of private and nongovernment agencies. Through their headquarters and branch units, these agencies reach millions of clients and serve a fundamental role in the health and population information activities so necessary for successful family planning programs. The government has been turning to these organizations for their operational skills in managing the nation's hospitals. During 1971–1972 virtually all government hospitals in the country are being operated by the Red Lion and Sun Society and other nongovernment organizations. These organizations obtain funding from government and nongovernment sources, and between March 1971 and March 1972 some $260,000 in grants was distributed from the family planning budget of the Ministry of Health. The most active of the nongovernment organizations currently engaged in family planning activities are the following:

Imperial Organization for Social Services, a large nationwide social service facility that operates under funding and administrative control of the Imperial Court. One of its particular activities involves operation of 249 rural clinics that serve a large portion of the rural population of the country.

Red Lion and Sun Society. Like the Red Cross in some other countries, this is a charitable agency that serves society in time of emergency. It is engaged in family planning through its many clinics, and family planning is a regular subject in all nursing schools of the society.

The Women's Organization of Iran, which functions under the presidency of Her Royal Highness Princess Ashraf Pahlavi and seeks to increase the participation of Iranian women in the development and growth of modern Iran. By the end of 1972 some 50 "Women's Institutes" are expected to be completed. They will include health and family planning centers.

Institute for the Protection of Mothers and Children. As noted above, this institute operates Farah Maternity Hospital in Tehran with over 40,000 obstetrical cases per year. The organization also has 11 maternity hospitals to serve rural communities in a number of provinces.

The Community Welfare Center of Iran, which operates under the auspices of Her Imperial Majesty Empress Farah with a board of trustees of government and selected nongovernment persons. The following services are offered: day-care services for children; health classes for mothers; family planning; handicraft training classes; literacy classes; an in-service training program for day-care instructors; and a youth program.

The seven Iranian universities—Tehran, National, Isfahan, Pahlavi (Shiraz), Jundi Shahpour (Ahwaz), Mashad and Tabriz—all of which have medical schools with clinics and hospitals attached. They engage in research, evaluation, and the provision of clinical services on family planning. They are beginning to involve other disciplines such as the social sciences and professional areas.

Commercial Activities

Another critical source of manpower, expertise, and services lies with the nation's private and commercial ac-

tivities: private physicians, hospitals, clinics, public relations and advertising agencies, and the commercial distribution system. The Family Planning Division began to contact Iran's physicians in 1971 to put them in touch with family planning activities. Iran was included in a three-country study of commercial contraceptive distribution commissioned by the Population Council from Arthur D. Little, Inc. (Little 1972). The policy implications of this study will receive careful attention. Several additional proposals to study the present and potential rate of private and commercial distribution are being considered. A national organization of physicians is currently emerging and is expected to facilitate the exchange of information and contacts with the Ministry of Health.

Foreign Assistance

Coordination

In mid-1970 the government of Iran requested the United Nations Development Program office in Tehran to initiate a procedure whereby all external inputs into the national family planning effort would be coordinated by the office of the UN resident representative. The purpose is to maximize the effect of outside support by reducing duplication among donor activities. The procedure is also expected to reveal areas that need support in the evolution of the comprehensive program. An initial donors' meeting was held in New York in 1970 and was followed by meetings in Tehran. A more comprehensive meeting was held in November 1971 to brief donors and prospective donors on the current status and plans of the government programs and to identify portions requiring additional support.

United Nations

In 1969 the United Nations Development Program appointed a population program officer, resident in Tehran, to serve the Turkey-Iran-Afghanistan region. The present UN Senior Population Advisor serves Iran only. In early 1971 after the initial donors' conference described above, the UN carried out a comprehensive review of the Iranian program through a UN-WHO-UNESCO team chaired by Lord Caradon. After this team had submitted its interagency report in mid-1971, the government prepared a series of project requests that were directed to the UN Fund for Population Activities (UNFPA) and other donor groups. UNFPA indicated its intention to support a number of these projects, and the details of their implementation were worked out in late 1971. The projects to be supported by UNFPA are:

- a pilot project on maternity-centered family planning to introduce and develop maternity-centered family planning (postpartum) activities initially in five maternity hospitals and eight maternal-and-child-health clinics
- a pilot project to develop a comprehensive family planning program in a model province and to employ and evaluate different approaches designed to increase the acceptance and continuous use of contraception
- a pilot project to develop a comprehensive maternal-and-child-health and family planning program (including postpartum) in a model county
- assistance to family planning training activities in terms of both current training needs and long-term planning
- support to research related to the family planning program for expanded and coordinated research by the Ministry of Health and other organizations
- assistance to nongovernmental organizations to finance new or additional population and family planning project activities
- assistance to develop the communications activities of the Family Planning Division
- assistance to a central management and implementation unit of the Family Planning Division to strengthen its implementation, monitoring, and reporting procedures
- a project to be carried out by the University of Tehran to improve age reporting through development of a calendar of well-known events
- provision of 109 vehicles, some to pilot projects and some for improved effectiveness of field workers and their supervisors.

Cooperating with UNFPA for the implementation of this large grant agreement are UNICEF (the UN Children's Emergency Fund), UNESCO, WHO, and others. To carry out these projects UNFPA is providing a grant of $1.66 million to be used during the 17-month period between completion of the agreement and the beginning of the fifth five-year development plan in 1973 (UNFPA 1971).

In addition to projects mentioned above, the UN has provided or has agreed to provide:

- two long-term demography consultants
- fellowships and study grants for visits to US-sponsored workshops
- a short-term consultant on the development of a documentation center
- one consultant each to the Institute of Labor and Social Security and the Social Insurance Organization
- 44 utility and specially equipped vehicles (UNICEF).

As already noted, ECAFE in Bangkok sponsored and helped organize a one-month training program on program evaluation in the fall of 1971.

During November 1971 the International Bank for Reconstruction and Development sponsored a thorough inventory of all Iranian organizations currently active or interested in family planning. The study is intended to: assist the government to gain an overview of current activities and organizational resources, guide the nature and scope of UN population activities in Iran, and perform the normal preinvestment functions of the bank as it prepares to consider a loan to Iran for family planning purposes. The study is being carried out by a government task force with the assistance of a UN consultant and in cooperation with the World Bank. A detailed report will be issued.

In addition, UNICEF formerly provided teaching stipends and per diem for training classes at the Firouzgar Family Planning Training Center. It has also supplied vehicles and medical equipment for a number of maternal-and-child-health and family planning clinics. Before providing its two demographic experts, the UN provided the services of a demographer (subsequently supported by the Population Council) who assisted with the first basic studies in family planning. WHO sponsored an international seminar on "Advances in basic, clinical, and public health aspects of human reproduction" in Tehran in 1969 and sponsored two

training seminars abroad in that same year.

Population Council

In 1966 the government of Iran invited the Population Council to send a mission to undertake an initial survey of the population problem. Since then the Population Council has provided consultants, assisted the Ministry of Health and Tehran University with research grants, donated IUD supplies, and supported training abroad. The Council since 1968 has had a resident consultant to the program, and, since 1970, a second consultant on the Isfahan project. Since 1968 the major areas of Council assistance to the Iranian program have been the following:

- *training*—subsidizing the work of the Firouzgar Training Center; assisting with seminars and workshops; grants to help set up training centers in Tehran and Isfahan; short- and long-term out-of-country training
- *postpartum program*—at Farah Maternity Hospital for a four-year period from 1971
- *consultants*—numerous short-term consultants in various aspects of family planning
- *research*—acceptor studies, new contraceptive trials, family planning in Muslim culture, the Taylor-Berelson study on maternal and child health and family planning, attitudes to family planning, and the commercial distribution of contraceptives (Little 1972)
- *evaluation*—a study grant to the unit director and supply of a short-term consultant on organizing and operating the unit
- *communications*—support for the major Isfahan project; communications equipment, films, graphics, and an audiovisual vehicle; books and subscriptions of council publications, journals, and other documents in the libraries of the minister of health and several universities.
- *data-processing equipment*—for use in compiling service statistics and in doing research
- *contraceptives*—all IUDs and insertors distributed by the Ministry of Health since 1967 and Copper-T IUDs for clinical trials.

Since its inception, Council grants to the program total nearly $800,000.

Agency for International Development

USAID, the world's largest provider of funding for population activities, contributes indirectly to the Iranian program. Through a number of cooperating agencies USAID is providing assistance to the postpartum program (Farah Hospital), a World Education, Inc., project, and communications projects, and offering fellowships, which include provision of three overseas population interns from the United States currently working in Iran.

Swedish International Development Authority

SIDA has supplied Iran with part of its condom needs and has agreed to provide equipment needed to set up a printing facility for family planning materials.

Others

Other organizations that are assisting or cooperating in some way with the Iranian population effort include the Regional Cooperation for Development (RCD) (a three-country organization of Turkey, Iran, and Pakistan), the Central Treaty Organization (CENTO), the universities of North Carolina and Chicago, the International Planned Parenthood Federation, the Pathfinder Fund, the Ford Foundation, and the UK Ministry of Overseas Development.

Plans for the Future

The overall goal of the family planning program over the next six years (that is, to the end of the fifth five-year plan in 1978) is to reduce the present 3.2 percent per year rate of natural increase to 2.4. The corresponding crude birth rates are 48 and 38 births per 1,000 population per year. To accomplish this reduction the program will have to provide contraceptive services to 3.6 million women and avert approximately one million births. An assumption that each woman will visit a maternal-and-child-health and family planning clinic nine times per year translates to 32.5 million visits during the period. To meet this demand, the Family Planning Division plans to strengthen and expand program components as follows:

- *training*—to continue to expand training of medical and paramedical personnel. Twenty-three additional provincial training centers will be needed to meet the target of 400,000 trainees during the fifth plan
- *information and education*—to step up these media-based and educational activities with the ultimate goal of making the entire population aware of population and family planning
- *clinic services*—to establish a network of clinics to serve a rural population of 18 million with a target ratio of one clinic per 10,000 population (1,800 clinics). For the urban population of 13 million, 650 clinics will be needed to meet the target ratio of one per 20,000 population. As there are already more than 1,600 clinics in operation, it will be necessary to open an additional 850 clinics during the fifth plan to meet these targets. In addition to these numbers, part-time clinics will begin to operate on a full-time basis.

Other areas to be strengthened or expanded include:

- *research and program evaluation*
- *study of population affairs*—to establish a socioeconomic basis for policy decision making
- *Women's Health Corps*—to increase output of trained personnel to 1,000 per year.

Summary

Looking at Iran's family planning effort from the perspective of its first five years, we can summarize the current situation as follows: program policy is to offer contraceptive information and services through the growing national network of family planning clinics, relying almost exclusively on pills as the contraceptive technique. The strength and sense of urgency of the national commitment can be seen both in the rapidly increasing channeling of talent and financial resources to this effort and in the ambition of national goals for decreasing the current high population growth rate. It is fortunate that this strength of resolve exists, for it is matched by the problems that stand between the program and its

goals. But these problems are well known to the nation's leaders, and many of these legacies of the past are undergoing rapid improvement. We must conclude that if great effort, effective national leadership, and adequate resources—against a backdrop of burgeoning socioeconomic development—can lead to success in family planning, the prognosis for Iran is favorable.

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Persons wishing to receive any or all of these publications should address their requests to: Information Office, The Population Council. Bulk orders are available for educational purposes.

The Population Council also publishes books and occasional papers on selected topics related to population and family planning. The following publications will be sent free of charge to libraries of universities, research institutions, and related organizations in the developing countries of Asia, Africa, and Latin America where study in population and family planning is under way or planned. Each request should be sent to the Information Office with a letter describing the institution's training and research programs. Purchase orders from individuals and from institutions in areas other than those mentioned above should be directed to Key Book Service, Inc., 425 Asylum Street, Bridgeport, Connecticut 06610, USA.

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Newman, Sidney H., Mildred B. Beck, and Sarah Lewit (eds.). *Abortion, Obtained and Denied: Research Approaches.* 1971. 200 pages. $4.50.

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Bean, Lee L., Richmond K. Anderson, and Howard J. Tatum. *Population and Family Planning: Manpower and Training.* 1971. 136 pages. $3.95.

Callahan, Daniel. *Ethics and Population Limitation.* 1971. 49 pages. $3.95.

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